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1 RECORD OF ORAL HEARING  
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3 UNITED STATES PATENT AND TRADEMARK OFFICE  
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5  
6 BEFORE THE BOARD OF PATENT APPEALS  
7 AND INTERFERENCES  
8

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10 Ex parte SHIGERU SUZUKI,  
11 TAKESHI ODA,  
12 and NORIHIRO SHIMIZU  
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15 Appeal 2009-002641  
16 Application 10/530,480  
17 Technology Center 1700  
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20 Oral Hearing Held: May 13, 2009  
21

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23  
24 Before ADRIENE L. HANLON, CHUNG K. PAK, and  
25 JEFFREY B. ROBERTSON, Administrative Patent Judges  
26

27 ON BEHALF OF THE APPELLANT:

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1 MS. BOBO-ALLEN: Calendar No. 12, Appeal No. 2009-2641, Mr.  
2 Pitlick.

3 JUDGE HANLON: Thank you.

4 MS. BOBO-ALLEN: Uh-huh.

5 JUDGE HANLON: Good morning, Mr. Pitlick.

6 MR. PITLICK: Morning. If you don't mind, I'll hand the court  
7 reporter my business card to start with.

8 JUDGE HANLON: Yeah, that's fine.

9 MR. PITLICK: Couldn't get it out. Here you go.

10 COURT REPORTER: Thank you. You're very kind.

11 JUDGE HANLON: You have 20 minutes to present your argument.  
12 You may begin when you're ready.

13 MR. PITLICK: Okay. The invention here is a heat shrinkable film.  
14 It's got two necessary components, A and B, and an optional component, C.  
15 We have basically an issue of obviousness under 103. I'm really only going  
16 to focus on two of the references. The others that the Examiner has applied  
17 are not controversial, and they have to do with Matsui, et al., and Lind (ph.),  
18 et al.

19 Now, basically, the invention is characterized by two specific features  
20 that we believe distinguish it from the prior art. Number one, for component  
21 A, we have a particular block co-polymer, which is required to have, but  
22 we're calling it a microphase separation structure, comprising a soft phase  
23 and hard phase, and this meaning of this term is defined in the specification.  
24 That's not an issue. The other requirement is that we have a styrene type  
25 polymer, which has a syndiotactic structure.

1 Now, the main reference, Matsui, et al., is prior art of the assignee.  
2 Matsui, there's a number of embodiments disclosed in Matsui. The  
3 Examiner appears to be relying on one which has, number one, it begins  
4 with a block co-polymer which doesn't distinguish between those that have  
5 the microphase separation and those which do not. And Matsui can also  
6 have a, I'll call it a styrene-type polymer, or co-polymer.

7 And as we've pointed out in our remarks, syndiotactic polystyrene is  
8 pretty specific. It's not your garden variety polystyrene, which is normally  
9 referred to as atactic. Atactic polystyrene has basically random locations of  
10 the pendant groups of the styrene or the polystyrene backbone. Syndiotactic  
11 you have every other, or let's say, in every other pendant group goes in the  
12 same direction. So you have -- let's use the terms north and south. One,  
13 three, five, seven might go north. Two, four, six might go south. That kind  
14 of thing.

15 JUDGE PAK: Counsel, with respect to a styrene type polymer having  
16 syndiotactic structure, isn't it well known that such material has been used  
17 for making a heat shrinkable film?

18 MR. PITLICK: Well, yes. I mean, we even describe in the  
19 specification that there is prior art that says it has been used.

20 JUDGE PAK: And it also has been used with block copolymers. Am  
21 I correct?

22 MR. PITLICK: Again, I'll have to look at our specification. We do  
23 list a number of prior art, but the fact is, this prior art is not being relied on  
24 by the Examiner.

25 JUDGE PAK: With respect to Matsui, it teaches copolymers -- sorry  
26 -- block copolymers corresponding to your component A, which contain

1 overlapping proportions of the aromatic -- in fact, substantially or exactly  
2 overlapping with respect to the claimed proportions of an aromatic binder  
3 compound. And Matsui generally discusses the same type of the conjugated  
4 diene as well as the same type of an aromatic binder compound. And -- your  
5 examples of making block copolymers, component A, appear to be  
6 substantially identical to those shown in Matsui. And -- most of your block  
7 copolymer properties relating to lost tangent at different temperatures in  
8 your table 1 seem to correspond to or are substantially close to those shown  
9 in the table 1 of Matsui. Isn't there a reasonable basis to believe that --  
10 Matsui's block co-polymer also has the claimed microphase separation  
11 structure?

12 MR. PITLICK: All right. In answer to your question, Matsui, et al.,  
13 does not distinguish between having that structure and not having that  
14 structure. You can look in the various examples in Matsui. Some of those  
15 examples are quite similar to our reference example 1. We never said that  
16 Matsui, et al., broadly, is not inclusive of the polymers having such a  
17 microphase separation. Our point is Matsui, et al., does not distinguish  
18 between them, and certainly, Matsui, et al., covers those that don't have the  
19 microphase separation. And so in our comparative data, for example, when  
20 we use reference example 1, which doesn't have that microphase separation,  
21 we get an inferior result. So that's number one. We're, in effect, taking a  
22 specific, let's say, subgenus, where you have the microphase separation --  
23 and, again, Judge Pak, I'm assuming you understand, because I did mention  
24 that it is defined in the specification, what we mean by microphase  
25 separation. The fact that you have block co-polymer where you may have  
26 styrene, you may have a mixture of styrene and butadiyne, et cetera, that's

1 not sufficient to give you microphase separation. And, again, I assume that  
2 the question that you've asked me, that you know what the difference is.  
3 That's number one.

4 Number two, Matsui, et al., says nothing about how any other  
5 component is made that has styrene in it. And you have to go to specific --  
6 you have to carefully use specific starting materials and catalysts especially  
7 if you're going to come up with syndiotactic polystyrene. Now, the  
8 Examiner relies on Lind, et al., for the syndiotactic polystyrene, and the  
9 Examiner has mischaracterized Lind, et al. Lind, et al., basically says when  
10 you use a single-site catalyst, you get certain kinds of difference structures,  
11 et cetera. Syndiotactic polystyrene is just one of many different kinds of  
12 structures you can get. You can also get isotactic polystyrene, where instead  
13 of having the north/south, north/south feature that I talked about before, you  
14 might have all of them going north, as opposed to, again, a random mixture,  
15 which is what one of ordinary skill in the art would interpret Matsui, et al.,  
16 to be talking about.

17 For example, syndiotactic polystyrene is known to be crystalline.  
18 Random polystyrene, the atactic polystyrene is not crystalline. It's well  
19 known that they have different properties and different structures. And,  
20 again, we've asked the Board to take official notice of the fact that there is a  
21 difference.

22 And in terms of the comparative data, I want to be very careful about  
23 what we've said. We didn't necessarily say that in every instance it's better  
24 than Matsui. In some cases, it's just as good, but we have better heat  
25 resistance. Let me just find out where we said that in the brief.

1 JUDGE PAK: Did you rely on the unexpected advantage as the basis  
2 --

3 MR. PITLICK: Mr. Pak, Judge Pak, I can't hear you. I'm sorry.

4 JUDGE PAK: Did you rely on the unexpected results as a basis for  
5 patentability in your brief?

6 MR. PITLICK: Well, that's part of it, but the fact that we believe we  
7 have unexpected results doesn't mean we concede there's a prima facie case.  
8 There is no prima facie case because it's not prima facie obvious to use a  
9 syndiotactic polystyrene in Matsui. But it is certainly evidence of  
10 patentability. And I believe, and I think you can check this as well, that  
11 syndiotactic polystyrene -- of course, it's crystal and it's normally opaque.  
12 Yet, we're able to get a transparent film that's about as transparent as you  
13 would get without having that syndiotactic polystyrene.

14 JUDGE PAK: I noticed that --

15 MR. PITLICK: I'm trying to find the discussion of the data. Yeah, as  
16 we say on page 5 of the Appeal Brief, "The present invention results in a  
17 heat shrinkable film of which the heat resistance is remarkably improved  
18 without impairing conventional heat shrinkability, spontaneous shrinkability,  
19 and transparency." So if you compare the data, our data, with Matsui, in  
20 terms of those other properties, like heat shrinkability, et cetera, you're going  
21 to find the data is similar. But you're not going to find the same kind of heat  
22 resistance. Matter of fact, I'm not even sure, and I'll have to go back and  
23 check, if heat resistance is even mentioned in Matsui, et al.

24 So, again, there is no prima facie case because there is absolutely no  
25 reason to use syndiotactic polystyrene. And I might also want to -- I'd like  
26 to point out one other thing because it might be interpreted the wrong way.

1           Page 2 of the Reply Brief, the first full paragraph I said "In reply,  
2 applicants have never argued that the genus of styrene type polymers does  
3 not include, in effect, syndiotactic styrene type polymers." What I'm saying  
4 is in a vacuum when you have -- when you see the term styrene polymers,  
5 obviously, it can include all types, syndiotactic, isotactic, atactic, et cetera.  
6 However, that statement was never meant to concede that ones of ordinary  
7 skill in the art, which is the person's eyes through which you have to look,  
8 look at this information. One of ordinary skill in the art would never include  
9 syndiotactic polystyrene as a styrene within the genus of Matsui, et al. So I  
10 don't want to leave the wrong impression on that particular statement in the  
11 reply brief. That's it. Any other questions?

12           JUDGE HANLON: Yes, I wanted to know in the specification where  
13 you discuss this -- let me just -- the microphase separation structure,  
14 comprising the soft phase and the hard phase.

15           MR. PITLICK: Okay. If you give me a little time, I can find it for  
16 you. All right. Well, I got the PG-PUB (ph.), which you probably don't  
17 have, but let me find it in the regular spec as filed. Look at page 7, line 14.

18           JUDGE HANLON: Okay. Okay. Thank you. Okay. Thank you.  
19 The case is submitted.

20           Whereupon, the hearing concluded on May 13, 2009.